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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,337	03/15/2004	Toshimasa Akagi	04174 /LH	1935
1933	7590	08/15/2006	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC			PATEL, VISHAL A	
220 Fifth Avenue			ART UNIT	
16TH Floor			PAPER NUMBER	
NEW YORK, NY 10001-7708			3673	

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,337

Applicant(s)

AKAGI ET AL.

Examiner

Vishal Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) 5, 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al (US. 3,738,669).

Anderson discloses a waterproof structure having a waterproof member that is interposed between a first member (housing that contains the shaft) and a second member (shaft). The waterproof member (10) is a pipe (the seal 10 is an annular member) that is formed from a material with elasticity and anti-permeation properties (elastomeric material), terminal end faces (26 and 28) of the pipe are disposed to be opposed to each other with their centers being aligned.

The waterproof member is formed of rubber or a resin, and the waterproof member has one of a perfect circular shape (the waterproof member is a pipe), a rectangular shape, a polygonal shape and an oval shape.

The first and second member are engaged or attached to each other, whereby the terminal end faces of the pipe are brought into close contact with each other and waterproofing is effected (method limitations given little patentable weight in an apparatus claim, but the ends are out of contact and then brought in contact).

The seal of Anderson is a pipe because the members form a pipe structure as shown in figure 1. Furthermore the pipe has a cross section in figure 4 that is a polygonal shape.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panayides et al (US. 6,401,398) in view of Atusmi et al (US. 6,161,878).

Panayides discloses a waterproof structure having a first member (door 26) and a second member (helicopter body), the first member having a groove (groove in the door that has a flat surface 25 of a waterproof member), the second having a projection (45) that contacts a waterproof member (18), the waterproof member is a pipe having a perfect circular shape or a rectangular shape or a polygonal shape or an oval shape (the waterproof member has a shape that is the peripheral shape of the door) and the waterproof member is in the groove.

The first and second member are engaged or attached to each other, whereby the terminal end faces of the pipe are brought into close contact with each other and waterproofing is effected (method limitations given little patentable weight in an apparatus claim). When an outer peripheral surface of the pipe is pressed by engagement between the first and second members, whereby the terminal end faces of the pipe are brought into close contact with each other (method limitations given little patentable weight in an apparatus claim).

Panayides discloses the invention substantially as claimed above but fails to disclose that the waterproof structure having terminal ends (meaning that the seal is split ring seal). Atusmi discloses a structure having a first member being assembled to a second member, the first

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member having a seal (4) that is a split seal and is contracted by fastener that fasten the first and second members together and the split seal is capable of being deformed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure that the waterproof structure of Panayides to have a split as taught by Atsumi, to provide deformation of the waterproof structure (column 6, line 31 of Atsumi) and prevent kinking (this is the case due to the inherent tolerance provided by the split in the waterproof structure). Furthermore providing a split in a member make the installation of the member easier.

Response to Arguments

5. Applicant's arguments filed 6/14/06 have been fully considered but they are not persuasive.

Applicants' argument that Anderson does not teach a pipe and a cross-section of the pipe having one of a perfect circular shape, a rectangular shape, a polygonal shape and an oval shape is not persuasive because as stated in the rejection the seal member is formed in an annular form hence a pipe and the cross section shown in figure 3 is of one of a perfect circular shape, a rectangular shape, a polygonal shape and an oval shape.

Applicants' argument against that Atsumi does not teach that the split seal members are not shaped in a manner that is applicable to the hollow seal of Panayides is correct but Atsumi is only used to teach that a split seal members provides a better seal.

Furthermore evidence is provided by the reference of Radke to have a seal ring to be formed with no split or a single split or plural split is well know and obvious to one skilled in the art.

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Furthermore evidence is provided by Ditcher to have a solid seal member or a hollow seal member and Taylor to have a hollow seal having a split is well known to one skilled in the art.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakazato et al.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

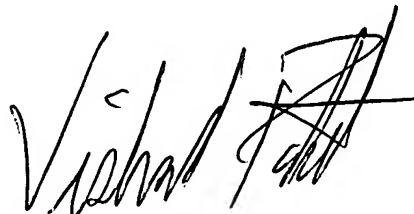
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP
August 13, 2006

A handwritten signature in black ink, appearing to read 'Vishal Patel', with a stylized flourish at the end.

Vishal Patel
Primary Examiner
Tech. Center 3600